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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/392, 925	09/09/99	PARKES	J JHP-10-5377

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*T-1*  
EXAMINER

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ART UNIT	PAPER NUMBER
1754	5

DATE MAILED: 10/03/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

**Office Action Summary**

Application No. <b>09/392,925</b>	Applicant(s) <b>Parkes</b>
Examiner <b>Eileen E. Nave</b>	Group Art Unit <b>1754</b>

Responsive to communication(s) filed on Sep 9, 1999

This action is FINAL.

Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

**Disposition of Claims**

Claim(s) 1-20 is/are pending in the application.

Of the above, claim(s) 10-20 is/are withdrawn from consideration.

Claim(s) \_\_\_\_\_ is/are allowed.

Claim(s) 1-9 is/are rejected.

Claim(s) \_\_\_\_\_ is/are objected to.

Claims 1-20 are subject to restriction or election requirement.

**Application Papers**

See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.

The proposed drawing correction, filed on \_\_\_\_\_ is  approved  disapproved.

The specification is objected to by the Examiner.

The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. § 119**

Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

All  Some\*  None of the CERTIFIED copies of the priority documents have been received.

received in Application No. (Series Code/Serial Number) \_\_\_\_\_.

received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_.

Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

**Attachment(s)**

Notice of References Cited, PTO-892

Information Disclosure Statement(s), PTO-1449, Paper No(s). 4

Interview Summary, PTO-413

Notice of Draftsperson's Patent Drawing Review, PTO-948

Notice of Informal Patent Application, PTO-152

**EEN** -- SEE OFFICE ACTION ON THE FOLLOWING PAGES --

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## **DETAILED ACTION**

### ***Election/Restriction***

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - I. Claims 1-9, drawn to a method for the disposal of a rocket motor, classified in class 588, subclass 202+.
  - II. Claims 10-20, drawn to an apparatus for the burning of a rocket motor, classified in class 110, subclass 203+.
2. The inventions are distinct, each from the other because of the following reasons:  
Inventions I and II are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (M.E.P.. § 806.05(e)). In this case, the process as claimed can be practiced by another materially different apparatus such as in a pressure and temperature resistant vessel having a neck portion and a gas chamber portion with heat dissipating means.
3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

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4. Because these inventions are distinct for the reasons given above and the search required for Group I is not required for Group II, restriction for examination purposes as indicated is proper.

5. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

6. During a telephone conversation with applicants' attorney, William Hogg, on September 28, 2000 a provisional election was made traverse to prosecute the invention of Group I, claims 1-9. Affirmation of this election must be made by applicant in replying to this Office action. Claims 10-20 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

7. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(I).

***Claim Rejections - 35 USC § 102***

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 1, 2, 5 and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by RU 2021560 C1.

RU 2021560 C1 discloses the disposal of solid rocket fuel by combustion in the rocket body comprising placing the charge with the opening for combustion products upwards and filling with coolant to a level which separates the main part of the combustion surface. During the combustion, coolant is supplied to the combustion chamber to regulate the combustion process. Water of neutralizing solutions of soda and alkali are used as coolant. RU 2021560 C1 also discloses that this method increases safety.

*Claim Rejections - 35 USC § 103*

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

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1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

10. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

11. Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over RU 2021560 C1.

RU 2021560 C1 discloses the disposal of solid rocket fuel by combustion in the rocket body comprising placing the charge with the opening for combustion products upwards and filling with coolant to a level which separates the main part of the combustion surface. During the combustion, coolant is supplied to the combustion chamber to regulate the combustion process. Water of neutralizing solutions of soda and alkali are used as coolant. RU 2021560 C1 also discloses that this method increases safety (see English Abstract).

RU 2021560 C1 does not disclose removing the venturi mechanism in the rocket prior to the burning step; however, it would have been obvious to one of ordinary skill in the art at the

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time the invention was made to remove the venturi mechanism in the rocket prior to the burning step in the process of RU 2021560 C1 because one of ordinary skill in the art would remove the venturi mechanism for safety reasons.

RU 2021560 C1 does not disclose filtering liquid in the enclosure and recycling the filtered liquid; however, it would have been obvious to one of ordinary skill in the art at the time the invention was made to filter liquid in the enclosure and recycle the filtered liquid in the process of RU 2021560 C1 because one of ordinary skill in the art would optimize the process for cost efficiency reasons by filtering and reusing valuable coolant already present instead of buying and using new coolant and also having to deal with disposing of used coolant.

12. Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over RU 2045675 C1 in view of RU 2021560 C1.

RU 2045675 C1 discloses a solid fuel rocket motor combustion and destruction rig which has a combustion chamber containing housing with a bottom inlet ports set vertically inside the combustion chamber, a solid fuel charge inside the housing and a tank of a liquid coolant connected to the housing through its inlet. The housing's inlet is located at the bottom and its outlet at the top and part of its inner free space is filled with the liquid coolant (see English Abstract).

RU 2045675 C1 does not specifically disclose what the liquid coolant may be; however, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use neutralizing solutions of soda and alkali are used as coolant in the process of RU 2045675 C1

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because RU 2021560 C1 teaches supplying coolant to a combustion chamber to regulate the combustion process in the disposal of solid rocket fuel by combustion in a rocket body.

Neither RU 2045675 C1 nor RU 2021560 C1 disclose removing the venturi mechanism in the rocket prior to the burning step; however, it would have been obvious to one of ordinary skill in the art at the time the invention was made to remove the venturi mechanism in the rocket prior to the burning step in the process of RU 2045675 C1 because one of ordinary skill in the art would remove the venturi mechanism for safety reasons.

Neither RU 2045675 C1 nor RU 2021560 C1 disclose filtering liquid in the enclosure and recycling the filtered liquid; however, it would have been obvious to one of ordinary skill in the art at the time the invention was made to filter liquid in the enclosure and recycle the filtered liquid in the process of RU 2045675 C1 because one of ordinary skill in the art would optimize the process for cost efficiency reasons by filtering and reusing valuable coolant already present instead of buying and using new coolant and also having to deal with disposing of used coolant.

### *Conclusion*

12. No claims are allowed.
13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eileen E. Nave whose telephone number is (703) 305-0033.

*EEN*  
Nave/een

September 30, 2000

*Steven P. Griffin*  
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10/2/00